

Message

From: Johnson, Chris [chris.johnson@ncdenr.gov]
Sent: 6/23/2017 9:52:58 PM
To: Tong-Argao, Sania [Tong-Argao.Sania@epa.gov]; Strynar, Mark [Strynar.Mark@epa.gov]
CC: Medina-Vera, Myriam [Medina-Vera.Myriam@epa.gov]; Buckley, Timothy [Buckley.Timothy@epa.gov]; Satterwhite, Dana [dana.satterwhite@ncdenr.gov]; Karoly, Cyndi [cyndi.karoly@ncdenr.gov]; Jones, Nick [nick.jones@ncdenr.gov]; Culpepper, Linda [linda.culpepper@ncdenr.gov]; Wiggins, Kent [kent.wiggins@ncdenr.gov]
Subject: RE: Discussion for sampling and analysis in Wilmington

Just arrived back at our lab from the trip to Fayetteville. I will address your questions and discuss with the proper personnel first thing on Monday. It was very good to meet you all today and I hope to have more time next visit! Thanks for your help on this project.

Chris Johnson
NC DEQ-DWR
Water Sciences Section

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From: Tong-Argao, Sania [mailto:Tong-Argao.Sania@epa.gov]
Sent: Friday, June 23, 2017 2:11 PM
To: Strynar, Mark <Strynar.Mark@epa.gov>; Johnson, Chris <chris.johnson@ncdenr.gov>
Cc: Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>
Subject: RE: Discussion for sampling and analysis in Wilmington

Hello Mark and Chris,

Thank you for bringing this to my attention and for reaching out to make sure that proper QA documentation is in place. Please see below for my thoughts and follow up questions.

- I agree with Mark that it's important to include the quality control (QC) samples such as trip blanks and spikes whenever possible.
- **Question from Chris:** *Mark, can you tell me about the requirement related to the QAPP? Is this something that needs to be "customized" for the particular project or is it a copy of our standard sampling procedure? Does EPA need a copy of the QAPP before testing begins?*

Sania's reply: I understand that the NC DEQ is responsible for sample collection whereas EPA is responsible for sample analysis.

Chris - *Can you please confirm that the 'standard sampling procedure' will be the standard operating procedure (SOP) used to collect samples? Also, is there a separate QAPP that outlines the other aspects of the particulars of this project (e.g., the who, what, when, where, and why of the project)? Please do send copy of both the NC DEQ standard sampling procedure as well as QAPP so that we may have a copy of the documentation that reflects the QA plan for the sample collection portion of the project.*

Note that the EPA requirement for QA project plans (QAPPs) is to have an approved QAPP in place prior to the start of sample collection and/or sample analysis. QAPPs are project specific so that the who, what, when, where, why, and how of a project can be documented as the plan to follow for a particular project. This doesn't mean that things won't or can't change. The key is to document the plan prior to the start of the project via an approved QAPP and to be sure to document any changes to the plan during the project.

In this case, the scope of EPA's work is with the sample analysis only. It is understood that NC DEQ is responsible for the sample collection and that NC DEQ has their own SOP and QAPP associated with the project (to be confirmed after receipt of these documents). *To help ensure QA documentation is complete on EPA's side of the house, I recommend an addendum to Mark's existing QAPP.* As Mark stated, the NC DEQ standard sampling procedure as well as existing QAPP can be referenced, and any detail that is unique to this project can also be outlined in the addendum for sample analysis such as reference to the specific analysis SOPs to be used.

Mark - To give you an idea of what info to include in the addendum, below is a brief list. Please let me know if you'd like to discuss what to include.

Who (Project Organization) – Who is responsible for each part of the project? A table can be used to identify EPA and NC DEQ folks or others doing the sample collection and analysis.

Why (Project Background) – Why is this project being conducted? Basically, what's the issue at hand and what do you want to accomplish (i.e., project goals/objectives)?

What/When/Where (Project Description) - Summarize work to be performed and expected products. What is the project schedule? Where are samples going to be collected, what types of samples are going to be collected, and how many samples do you plan to collect? You will want to specify NC DEQ's specific role and EPA's specific role in the project (i.e., EPA is receiving samples from NC DEQ who will follow their own protocols and QA plans.).

How (Sampling Methods/Sample Handling & Custody/Analytical Methods/Data Management) – Reference relevant SOPs.

Hope this helps,
Sania

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*Sania W. Tong Argao*  
Quality Assurance Manager  
Exposure Methods & Measurement Division (EMMD)  
National Exposure Research Laboratory  
U.S. EPA - Office of Research & Development

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From: Strynar, Mark
Sent: Friday, June 23, 2017 7:08 AM
To: Johnson, Chris <chris.johnson@ncdenr.gov>
Cc: Tong-Argao, Sania <Tong-Argao.Sania@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>
Subject: RE: Discussion for sampling and analysis in Wilmington

Chris,

I will let our QA staff answer that question for you. We have a QAPP that covers lab analysis. Also we have analysis SOPs referenced in our QAPP. I believe they would like to reference your QAPP, perhaps generic, and sampling SOP in our QAPP if it exists.

Mark

From: Johnson, Chris [<mailto:chris.johnson@ncdenr.gov>]
Sent: Thursday, June 22, 2017 9:47 AM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Subject: RE: Discussion for sampling and analysis in Wilmington

Mark, can you tell me about the requirement related to the QAPP? Is this something that needs to be "customized" for the particular project or is it a copy of our standard sampling procedure? Does EPA need a copy of the QAPP before testing begins? Etc...

Chris Johnson
NC DEQ-DWR
Water Sciences Section

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From: Strynar, Mark [<mailto:Strynar.Mark@epa.gov>]
Sent: Thursday, June 22, 2017 9:24 AM
To: Johnson, Chris <chris.johnson@ncdenr.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Culpepper, Linda <linda.culpepper@ncdenr.gov>; Satterwhite, Dana <dana.satterwhite@ncdenr.gov>; Brantley, Mark <mark.brantley@ncdenr.gov>; West, Steve <steve.west@ncdenr.gov>
Subject: RE: Discussion for sampling and analysis in Wilmington

Okay. My cell is Ex. 6 - Personal Privacy if you have any issues. I get in at 7 AM. Can we shoot for 9 AM in case I do not get finished prepping today.

Mark

From: Johnson, Chris [<mailto:chris.johnson@ncdenr.gov>]
Sent: Thursday, June 22, 2017 9:21 AM
To: Strynar, Mark <Strynar.Mark@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Culpepper, Linda <linda.culpepper@ncdenr.gov>; Satterwhite, Dana <dana.satterwhite@ncdenr.gov>; Brantley, Mark <mark.brantley@ncdenr.gov>; West, Steve <steve.west@ncdenr.gov>
Subject: RE: Discussion for sampling and analysis in Wilmington

I would like to come as early as possible in order to get the kits to Fayetteville. Perhaps before lunch if possible.

Chris Johnson
NC DEQ-DWR
Water Sciences Section

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From: Strynar, Mark [<mailto:Strynar.Mark@epa.gov>]
Sent: Thursday, June 22, 2017 9:16 AM

To: Johnson, Chris <chris.johnson@ncdenr.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Culpepper, Linda <linda.culpepper@ncdenr.gov>; Satterwhite, Dana <dana.satterwhite@ncdenr.gov>
Subject: RE: Discussion for sampling and analysis in Wilmington

Chris,

I am working to get this done today. Let me know when you will be available to come and get sample container tomorrow.

Mark

From: Johnson, Chris [<mailto:chris.johnson@ncdenr.gov>]
Sent: Thursday, June 22, 2017 8:25 AM
To: Strynar, Mark <Strynar.Mark@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Culpepper, Linda <linda.culpepper@ncdenr.gov>; Satterwhite, Dana <dana.satterwhite@ncdenr.gov>
Subject: RE: Discussion for sampling and analysis in Wilmington

Thanks for the reply, Mark.

I received word from the Wilmington RO and it looks like they will need 16 bottles to finish out their projected sampling. I haven't heard from the Fayetteville office, but based on what we've received from them for the first sampling event, I would think they need approximately 12 bottles to finish up. This is all based on the sampling being done this week.

Given the tight time frame for next week's sampling, we will probably need to drive the sample kits down to Fayetteville tomorrow afternoon if possible. I would also like to deliver the first set to you if we receive Wilmington's set in time. Either way, if there is any way we can have the sample kits ready tomorrow I would have time to get them to the samplers.

Thanks once again for your help on this project.

Chris Johnson
NC DEQ-DWR
Water Sciences Section

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From: Strynar, Mark [<mailto:Strynar.Mark@epa.gov>]
Sent: Thursday, June 22, 2017 6:50 AM
To: Johnson, Chris <chris.johnson@ncdenr.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Subject: RE: Discussion for sampling and analysis in Wilmington

One change Chris. I had wishful thinking. I am actually working on Friday and am not off. I will be here.

Mark

From: Johnson, Chris [<mailto:chris.johnson@ncdenr.gov>]
Sent: Wednesday, June 21, 2017 4:39 PM

To: Strynar, Mark <Strynar.Mark@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Subject: RE: Discussion for sampling and analysis in Wilmington

I will find out the number. Let me contact the regional folks. Thank you.

Chris Johnson
NC DEQ-DWR
Water Sciences Section

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From: Strynar, Mark [<mailto:Strynar.Mark@epa.gov>]

Sent: Wednesday, June 21, 2017 4:09 PM

To: Johnson, Chris <chris.johnson@ncdenr.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Subject: RE: Discussion for sampling and analysis in Wilmington

I am off Friday but we could have them prepared for your visit to pick up. How many sample bottles do you need? We typically replicate sample 10% of the samples and have a trip blank and a high and low trip spike as well.

Mark

From: Johnson, Chris [<mailto:chris.johnson@ncdenr.gov>]

Sent: Wednesday, June 21, 2017 1:53 PM

To: Strynar, Mark <Strynar.Mark@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Subject: RE: Discussion for sampling and analysis in Wilmington

It may be better if you could supply this material. Based on our conversation, the 1L bottles are preferable and we don't carry that size. Can we pick them up when we bring the first delivery? We may be able to get over there on Friday if that works with your schedules.

Chris Johnson
NC DEQ-DWR
Water Sciences Section

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From: Strynar, Mark [<mailto:Strynar.Mark@epa.gov>]

Sent: Wednesday, June 21, 2017 1:50 PM

To: Johnson, Chris <chris.johnson@ncdenr.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Subject: RE: Discussion for sampling and analysis in Wilmington

We could provide sample bottles if they are needed. In addition we have always included trip blanks and spikes with our assays for QA/QC purposes. We should strongly consider doing so in any future sampling efforts.

Mark

From: Johnson, Chris [<mailto:chris.johnson@ncdenr.gov>]

Sent: Wednesday, June 21, 2017 11:45 AM

To: Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Cc: Strynar, Mark <Strynar.Mark@epa.gov>

Subject: RE: Discussion for sampling and analysis in Wilmington

Good morning. Wondering if you could clarify a question from the conference call yesterday. Will your laboratory be providing sample bottles and preservative for future sampling events? Also, I see from your 2009 SOP that blanks and spikes were mandated for the coolers. If you require those, will they be provided? We aren't able to make the spikes since they can't be confirmed by analysis.

Thanks for your help.

Chris Johnson
NC DEQ-DWR
Water Sciences Section

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From: Lindstrom, Andrew [<mailto:Lindstrom.Andrew@epa.gov>]
Sent: Wednesday, June 21, 2017 8:04 AM
To: Johnson, Chris <chris.johnson@ncdenr.gov>
Cc: Strynar, Mark <Strynar.Mark@epa.gov>
Subject: RE: Discussion for sampling and analysis in Wilmington

Chris,

Great.

Please let me know if I can help in any way as we proceed with this project.

We're very grateful for your help with coordinating this effort.

Thank you very much,

Andy

From: Johnson, Chris [<mailto:chris.johnson@ncdenr.gov>]
Sent: Tuesday, June 20, 2017 3:39 PM
To: Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Subject: RE: Discussion for sampling and analysis in Wilmington

Received. Thank you.

Chris Johnson
NC DEQ-DWR
Water Sciences Section

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From: Lindstrom, Andrew [<mailto:Lindstrom.Andrew@epa.gov>]
Sent: Tuesday, June 20, 2017 2:57 PM
To: Buckley, Timothy <Buckley.Timothy@epa.gov>; Johnson, Chris <chris.johnson@ncdenr.gov>; Allenbach, Becky <Allenbach.Bekky@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Culpepper, Linda <linda.culpepper@ncdenr.gov>
Cc: Jones, Nick <nick.jones@ncdenr.gov>; Perez, Helen I <helen.perez@ncdenr.gov>; Satterwhite, Dana

<dana.satterwhite@ncdenr.gov>

Subject: RE: Discussion for sampling and analysis in Wilmington

All,

I've attached a copy of the field collection protocol that we have been using for PFAS compounds including GenX.

The shipping address and storage conditions are specified on page 6.

Please let us know if you have any questions.

Thank you very much,

Andy

-----Original Appointment-----

From: Buckley, Timothy

Sent: Tuesday, June 20, 2017 1:20 PM

To: chris.johnson@ncdenr.gov; Allenbach, Becky; Strynar, Mark; Medina-Vera, Myriam; cyndi.karoly@ncdenr.gov; linda.culpepper@ncdenr.gov

Cc: Lindstrom, Andrew; Jones, Nick; Perez, Helen I; Satterwhite, Dana

Subject: Discussion for sampling and analysis in Wilmington

When: Tuesday, June 20, 2017 2:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).

Where: Teleconference: Call in: 1 866 299 3188; Code: 9195412454

Thank you all for making time for this discussion. I know that there is a lot of pressure to move quickly on this project. ORD/NERL is happy to provide analytical support. To guide our involvement/effort, I am hoping that collectively we can provide answers to the following questions.

1. What question are we attempting to address with this sampling effort?
2. What is the sampling design?
3. What is the status and timeline of the QAPP?
4. Given split sample analysis (contract lab and NERL lab), how will differences in reported concentrations be managed?
5. What is the plan for communicating results and who has the lead?
6. What is the project timeline?
7. Do we need on-going coordination meetings?